

REMARKS

This application pertains to a novel syringe for delivering flowable and/or highly viscous materials.

Claims 1-3, 5, 6 and 8 are pending.

Claims 1, 6/1 and 8 stand rejected under 35 U.S.C. 102(b) as anticipated by Schmitz (US 3,724,076). The Examiner views Schmitz as disclosing a syringe comprising a syringe tube 30 having an outlet nozzle 36 constructed in one piece therewith, a material container 40 having open ends disposed in the syringe tube, a **piston 46**, a **handle 72** disposed on the syringe tube at an opposite end from the nozzle and connected thereto by means of a thread 26.

Applicant's syringe has a syringe piston (11) which can be moved through the handle into the syringe tube. The so-called "piston" (46) of the Schmitz reference is completely different from Applicant's piston, as can readily be seen by comparing the syringe piston (11), as seen in Applicant's Fig. 2 to the so-called "piston" (46) illustrated in Schmitz's Fig. 5. In point of fact, Schmitz's "piston" 46 is an elongated version of "piston" (44) which is shown in Schmitz's Fig. 2 as being wholly inserted into Schmitz's material container (40). Schmitz's "piston" (42, 46) has to be forced by flexible plunger 12 through the material container 40 to dispense the product therein. Clearly, Schmitz's "piston" (46) is different than Applicant's syringe piston (11), and the term "piston", as used in the Schmitz reference has a completely different meaning than the term "syringe piston" as used in Applicant's claims.

In addition, the "handle 72" that the Examiner mentions is nowhere to be

found in any of Schmitz's drawings, and same is not mentioned anywhere in Schmitz's disclosure. Applicant cannot find anything in Schmitz that is designated "72". Insofar as the Examiner indicates that Schmitz's "handle 72" is connected to Schmitz's "syringe tube" by means of a thread (26), Applicant presumes that the Examiner is actually referring to Schmitz's plunger guide (10) (see col. 2, lines 48-50 of Schmitz). Schmitz's plunger guide (10), however, is nothing like Applicant's handle (8).

Note that Schmitz's syringe comprises an outer cylinder element (30), which is screwed onto a plunger guide (10), which, in turn, is soldered onto the flanges of sleeve (22), which is then threaded onto a barrel (6) [see col. 2, lines 36-38]. By contrast, Applicant's syringe, excluding the removable material container and the syringe piston, has only two pieces; the Syringe tube and the handle threaded onto it.

In addition, it should be noted that Applicant's syringe piston (11) moves through the handle and into the syringe tube. By contrast, Schmitz has a plunger rod (8), which passes through barrel (6) to bear against the inner end of guide tube (10) [see col. 2, lines 31-36], and is attached to a flexible plunger (12) [col. 2, lines 40-42] and it is this flexible plunger (12) that ultimately enters the outer element (30). Thus, the closest thing that Schmitz has to Applicant's syringe piston (11) is a combination plunger rod (8) + flexible plunger (12); which is far different and more complicated than Applicant's simple syringe piston (11).

Accordingly, Schmitz's dental cavity filling device is completely different than and non-suggestive of Applicant's novel syringe, and the rejection of claims 1, 6/1

and 8 under 35 U.S.C. 102(b) as obvious over said reference should now be withdrawn.

Claims 2, 3, 5, and 6/2, 6/3 and 6/5 stand rejected under 35 U.S.C. 103(a) as obvious over Schmitz in view of Muller (US 5,875,928).

The Examiner relies on Muller for a plug (25) [actually, it is plug 24 having an o-ring 25 on it]. The addition of a plug (24) to the Schmitz device would make no sense and, in any case, would not overcome any of the differences discussed above with respect to Schmitz.

In this regard, it should be noted that Schmitz already removably inserts what he refers to as a "piston" (42, 46) into his material container (40) [see col. 3, lines 13-18; Fig. 2]. This "piston" is shaped to be seated in the end of the flexible plunger [col. 4, lines 21-27]. Operation of Schmitz's device forces the "piston" (42, 46) towards the end wall (38), thereby pushing the filling material out through the tip of the device [col. 3, lines 27-31]. A plug, such as that of the Muller reference, would therefore have no place in the Schmitz device and, if used, would destroy Schmitz's inventive concept. The Muller plug could not be seated in the end of Schmitz's flexible plunger, because it does not have the necessary shape.

Moreover, as indicated above, even if a way could be found to incorporate Muller's plug into Schmitz's device, Applicant's syringe would not be arrived at, because the differences discussed above would still exist.

The rejection of claims 2, 3, 5, and 6/2, 6/3 and 6/5 under 35 U.S.C. 103(a) as

obvious over Schmitz in view of Muller (US 5,875,928) should accordingly now be withdrawn.

In view of the present amendments and remarks, it is believed that claims 1 - 3, 5, 6 and 8 are now in condition for allowance. Reconsideration of said claims by the Examiner is respectfully requested, and the allowance thereof is courteously solicited.

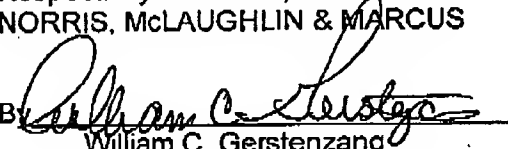
CONDITIONAL PETITION FOR EXTENSION OF TIME

If any extension of time for this response is required, Appellants request that this be considered a petition therefor. Please charge the required petition fee to Deposit Account No. 14-1263.

Additional Fee

Please charge any insufficiency of fee or credit any excess to Deposit Account No. 14-1263.


Respectfully submitted,  
NORRIS, McLAUGHLIN & MARCUS

By   
William C. Gerstenzang  
Reg. No. 27,552

WCG/tmh

220 East 42<sup>nd</sup> Street - 30<sup>th</sup> Floor  
New York, New York 10017  
(212) 808-0700

I hereby certify that this correspondence is being transmitted via facsimile to (703) 872-9306 and addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Arlington, VA 22313-1450 on March 11, 2004

  
Julie Harting  
Date March 11, 2004